

The Extensible Markup Language (XML) defines a way of marking up text to describe the structure of data. XML allows you to create your own markup language: you define the tags that give meaning to your data. XSLT is a way of transforming XML documents into other types of documents. XML Path Language (XPath) is used to identify parts of an XML document.

In this two-day course you will use the features of XSLT and XPath to develop stylesheets that convert XML documents to other XML, HTML, or text. The course begins with an introduction to commonly used tags such as template, apply-templates, and value-of. From there, you will learn how to use XPath nodetypes, axes, and predicates. Flow control and functions are covered next. Finally, you will learn some advanced XSLT features such as variables and parameters.

## **Course Objectives:**

- Write XSLT stylesheets that produce HTML, XML, and text.
- Identify XML elements using XPath.
- Use XPath functions and predicates.
- Call specifically named templates.
- Sort data and use modes
- Use XPath string functions to manipulate string values.
- Create and format numbers in the result document.
- Use variables and parameters within a stylesheet.
- Import templates from other XSLT stylesheets.
- Define precedence of XSLT templates.

Audience: Developers who wish to transform XML documents into other XML documents, HTML or text using XSLT.

Prerequisites: Experience using XML.

Number of Days: 2 days

## **1** Course Introduction

Course Objectives Course Overview Using the Workbook Suggested References

2 Introduction to XSLT Stylesheet, Source, and Result XSLT Processors Processor Implementations XPath Basics xsl:stylesheet xsl:template xsl:value-of xsl:apply-templates xsl:output

## 3 XPath Nodetypes

XPath Expressions XPath Context XPath Location Steps Element and Root Nodes Text and Attribute Nodes Comment and Processing Instruction Nodes Namespace Nodes Wildcards Whitespace



**Default Template Rules** 4 **XPath Axes and Predicates** Location Paths and Location Steps Peer Axis Types More Peer Axis Types Descendant Axis Types Ancestor Axis Types Node Tests Predicates **Functions** 5 **XSLT Flow Control** xsl:if xsl:choose xsl:for-each xsl:sort Named Templates Mode **Generating Output with XSLT** 6 **Output Methods** HTML Output Plain Text Output XML Output xsl:element and xsl:attribute Attribute Value Templates xsl:attribute-set Text, Processing-Instructions, and Comments Working with Namespaces 7 **Using XPath and XSLT Functions** XPath Datatypes and Functions Node Test Functions Node Set Functions **Boolean Functions** String Functions Number Functions The document() Function xsl:key and the key() Function 8 Advanced XSLT **Copying Elements** Numbering Variables Parameters Using Other Stylesheets apply-imports **Template Rule Conflicts** Extensions

Appendix – XSLT and XPath 2.0<br/>New FeaturesXSLT 2.0 Grouping Elements and<br/>FunctionsUser-Defined XSLT FunctionsMultiple Output and XHTML<br/>DocumentsTemporary TreesSequencesTypesStylesheets that are Schema-Aware<br/>Character Mapping<br/>Regular Expressions

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